Most Frequently Occurring Classifications of Patents Returned From A Search of 10718031 on July 27, 2006

Original Classifications

30	324/754
7	324/762
6	324/758
3	324/757
2	216/11
2	250/306
2	257/781
2	324/716
2	324/756
2	324/761
2	356/400
2	438/107
2	438/14
2	438/17
2	451/527

Cross-Reference Classifications

16	324/754
9	324/72.5
9	324/762
7	324/758
6	324/158.1
6	324/73.1
4	324/765
4	439/482
4	977/854
4	977/874
3	29/825
3	216/2
3	257/E21.512
3	324/761
3	356/401
3	438/15
3	977/860
3	977/873
2	29/25.35
2	29/827
2	29/846
2	134/42
2	257/E21.313
2	257/E21.508
2	257/E21.525
2	257/E23.02
2	257/E23.021
2	257/E23.06
2	324/755
2	374/7
2	438/125
2	438/18
2	438/611
2	438/614
2	451/548
2	451/552
2	977/849
2	977/879

Combined Classifications

46	324/754

16	324/762
13	324/758
9	324/72.5
7	324/158.1
6	324/73.1
5	324/761
5	324/765
4	324/757
4	439/482
4	977/854
4	977/874
3	29/825
3	216/2
3	250/306
3	257/E21.512
3	356/401
3	438/14
3	438/15
3	451/527
3	977/860
3	977/873
2	29/25.35
2	29/827
2	29/846
2	134/42
2	216/11
2	257/781
2	257/E21.313
2	257/E21.508
2	257/E21.525
2	257/E23.02
2	257/E23.021
2	257/E23.06
2	324/537
2	324/716
2	324/755
2	324/756
2	324/760
2	356/400
2	365/164
2	369/126
2	374/7
2	438/107
2	438/125
2	438/17
2	438/18
2	438/611
2	438/614
2	451/548
2	451/552
2	977/849
2	977/879

Titles of Most Frequently Occurring Classifications of Patents Returned
From A Search of 10718031 on July 27, 2006

46 324/754 (30 OR, 16 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF ELECTRIC COMPONENTS
324/537 .Of individual circuit component or element
324/754 ..With probe elements

16 324/762 (7 OR, 9 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF ELECTRIC COMPONENTS
324/537 .Of individual circuit component or element
324/754 ..With probe elements
324/762 ...Cantilever

13 324/758 (6 OR, 7 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF ELECTRIC COMPONENTS
324/537 .Of individual circuit component or element
324/754 ..With probe elements
324/758 ...Probe alignment or positioning

9 324/72.5 (0 OR, 9 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/72 TESTING POTENTIAL IN SPECIFIC ENVIRONMENT (E.G., LIGHTNING STROKE)
324/72.5 .Voltage probe

7 324/158.1 (1 OR, 6 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/158.1 MISCELLANEOUS

6 324/73.1 (0 OR, 6 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/73.1 PLURAL, AUTOMATICALLY SEQUENTIAL TESTS

5 324/761 (2 OR, 3 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF ELECTRIC COMPONENTS
324/537 .Of individual circuit component or element
324/754 ..With probe elements
324/761 ...Pin

5 324/765 (1 OR, 4 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF ELECTRIC COMPONENTS
324/537 .Of individual circuit component or element
324/765 ..Test of semiconductor device

4 324/757 (3 OR, 1 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF ELECTRIC COMPONENTS
324/537 .Of individual circuit component or element
324/754 ..With probe elements
324/757 ...Probe contact enhancement

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  4  439/482       (0 OR, 4 XR)
        Class   439 :  ELECTRICAL CONNECTORS
        439/476.1     INCLUDING HANDLE OR DISTINCT MANIPULATING MEANS

        439/481       .Randomly manipulated implement
        439/482       ..Test probe

  4  977/854       (0 OR, 4 XR)
        Could not find class title.
        Could not find subclass title.

  4  977/874       (0 OR, 4 XR)
        Could not find class title.
        Could not find subclass title.

  3   29/825       (0 OR, 3 XR)
        Class   029 :  METAL WORKING
        29/592        METHOD OF MECHANICAL MANUFACTURE
        29/592.1      .Electrical device making
        29/825        ..Conductor or circuit manufacturing

  3  216/2         (0 OR, 3 XR)
        Class   216 :  ETCHING A SUBSTRATE:  PROCESSES
        216/2         ETCHING OF SEMICONDUCTOR MATERIAL TO PRODUCE AN
                         ARTICLE HAVING A NONELECTRICAL FUNCTION

  3  250/306       (2 OR, 1 XR)
        Class   250 :  RADIANT ENERGY
        250/306       INSPECTION OF SOLIDS OR LIQUIDS BY CHARGED
                         PARTICLES

  3  257/E21.512   (0 OR, 3 XR)
        Class   257 :  ACTIVE SOLID-STATE DEVICES
        257/E21.001   PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE
                                 OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE
DEVICES OR OF
                                 PARTS THEREOF (EPO)
        257/E21.002   .Manufacture or treatment of semiconductor
                               device (EPO)
        257/E21.04    ..Device having at least one potential-jump
                              barrier or surface barrier, e.g., PN junction,
depletion
                               layer, carrier concentration layer (EPO)
        257/E21.499   ...Assembling semiconductor devices, e.g.,
                              packaging , including mounting, encapsulating, or
treatment
                              of packaged semiconductor (EPO)
        257/E21.506   ....Attaching or detaching leads or other
                                 conductive members, to be used for carrying current to
or
                                from  device in operation (EPO)
        257/E21.509   .....Involving soldering  or alloying process,
                               e.g., soldering wires (EPO)
        257/E21.511   ......Mounting on insulating member provided
                              with metallic leads, e.g., flip-chip mounting,
conductive
                              die mounting (EPO)
        257/E21.512   .......Right-up bonding (EPO)

  3  356/401       (0 OR, 3 XR)
        Class   356 :  OPTICS:  MEASURING AND TESTING
        356/399       BY ALIGNMENT IN LATERAL DIRECTION
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        356/401       .With registration indicia (e.g., scale)

3  438/14         (2 OR, 1 XR)
        Class   438 :  SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

        438/14        WITH MEASURING OR TESTING

3  438/15         (0 OR, 3 XR)
        Class   438 :  SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

        438/14        WITH MEASURING OR TESTING
        438/15        .Packaging (e.g., with mounting, encapsulating,
                         etc.) or treatment of packaged semiconductor

3  451/527        (2 OR, 1 XR)
        Class   451 :  ABRADING
        451/526       FLEXIBLE-MEMBER TOOL, PER SE
        451/527       .Interrupted or composite work face (e.g.,
                         cracked, nonplanar, etc.)

3  977/860        (0 OR, 3 XR)
        Could not find class title.
        Could not find subclass title.

3  977/873        (0 OR, 3 XR)
        Could not find class title.
        Could not find subclass title.

2   29/25.35      (0 OR, 2 XR)
        Class   029 :  METAL WORKING
        29/25.35      PIEZOELECTRIC DEVICE MAKING

2   29/827        (0 OR, 2 XR)
        Class   029 :  METAL WORKING
        29/592        METHOD OF MECHANICAL MANUFACTURE
        29/592.1      .Electrical device making
        29/825        ..Conductor or circuit manufacturing
        29/827        ...Beam lead frame or beam lead device

2   29/846        (0 OR, 2 XR)
        Class   029 :  METAL WORKING
        29/592        METHOD OF MECHANICAL MANUFACTURE
        29/592.1      .Electrical device making
        29/825        ..Conductor or circuit manufacturing
        29/829        ...On flat or curved insulated base, e.g.,
                          printed circuit, etc.
        29/846        ....Manufacturing circuit on or in base

2  134/42         (0 OR, 2 XR)
        Class   134 :  CLEANING AND LIQUID CONTACT WITH SOLIDS
        134/42        .Miscellaneous

2  216/11         (2 OR, 0 XR)
        Class   216 :  ETCHING A SUBSTRATE:  PROCESSES
        216/11        FORMING OR TREATING AN ARTICLE WHOSE FINAL
                         CONFIGURATION HAS A PROJECTION

2  257/781        (2 OR, 0 XR)
        Class   257 :  ACTIVE SOLID-STATE DEVICES
        257/734       COMBINED WITH ELECTRICAL CONTACT OR LEAD
        257/780       .Ball or nail head type contact, lead, or bond

        257/781       ..Layered contact, lead or bond
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2 257/E21.313 (0 OR, 2 XR)
Class 257 : ACTIVE SOLID-STATE DEVICES
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE DEVICES OR OF PARTS THEREOF (EPO)
257/E21.002 .Manufacture or treatment of semiconductor device (EPO)
257/E21.04 ..Device having at least one potential-jump barrier or surface barrier, e.g., PN junction, depletion layer, carrier concentration layer (EPO)
257/E21.085 ...Device having semiconductor body comprising Group IV elements or Group III-V compounds with or without impurities, e.g., doping materials (EPO)
257/E21.211 ....Treatment of semiconductor body using process other than deposition of semiconductor material on a substrate, diffusion or alloying of impurity material, or radiation treatment (EPO)
257/E21.214 .....To change their surface-physical characteristics or shape, e.g., etching, polishing, cutting (EPO)
257/E21.294 ......Deposition/post-treatment of noninsulating, e.g., conductive - or resistive - layers on insulating layers (EPO)
257/E21.3 ....Post treatment (EPO)
257/E21.305 ....Physical or chemical etching of layer, e.g., to produce a patterned layer from pre-deposited extensive layer (EPO)
257/E21.308 ....By chemical means only (EPO)
257/E21.31 ....By vapor etching only (EPO)
257/E21.313 ....Pre- or post-treatment, e.g., anti-corrosion process (EPO)

2 257/E21.508 (0 OR, 2 XR)
Class 257 : ACTIVE SOLID-STATE DEVICES
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE DEVICES OR OF PARTS THEREOF (EPO)
257/E21.002 .Manufacture or treatment of semiconductor device (EPO)
257/E21.04 ..Device having at least one potential-jump barrier or surface barrier, e.g., PN junction, depletion layer, carrier concentration layer (EPO)
257/E21.499 ...Assembling semiconductor devices, e.g., packaging , including mounting, encapsulating, or treatment of packaged semiconductor (EPO)
257/E21.506 ....Attaching or detaching leads or other conductive members, to be used for carrying current to or from device in operation (EPO)
257/E21.507 .....Formation of contacts to semiconductor by use of metal layers separated by insulating layers, e.g.,

self-aligned contacts to source/drain or emitter/base (EPO)

257/E21.508 .....Forming solder bumps (EPO)

2 257/E21.525 (0 OR, 2 XR)
Class 257 : ACTIVE SOLID-STATE DEVICES
257/E21.515 .....Involving use of mechanical auxiliary part without use of alloying or soldering process, e.g., pressure contacts (EPO)
257/E21.521 .Testing or measuring during manufacture or treatment or reliability measurement, i.e., testing of parts followed by no processing which modifies parts as such (EPO)
257/E21.525 ..Procedures, i.e., sequence of activities consisting of plurality of measurement and correction, marking or sorting steps (EPO)

2 257/E23.02 (0 OR, 2 XR)
Class 257 : ACTIVE SOLID-STATE DEVICES
257/E23.001 PACKAGING, INTERCONNECTS, AND MARKINGS FOR SEMICONDUCTOR OR OTHER SOLID-STATE DEVICES (EPO)
257/E23.01 .Arrangements for conducting electric current to or from solid-state body in operation, e.g., leads, terminal arrangements (EPO)
257/E23.012 ..Consisting of lead-in layers inseparably applied to semiconductor body (EPO)
257/E23.019 ...Consisting of layered constructions comprising conductive layers and insulating layers, e.g., planar contacts (EPO)
257/E23.02 ....Bonding areas, e.g., pads (EPO)

2 257/E23.021 (0 OR, 2 XR)
Class 257 : ACTIVE SOLID-STATE DEVICES
257/E23.001 PACKAGING, INTERCONNECTS, AND MARKINGS FOR SEMICONDUCTOR OR OTHER SOLID-STATE DEVICES (EPO)
257/E23.01 .Arrangements for conducting electric current to or from solid-state body in operation, e.g., leads, terminal arrangements (EPO)
257/E23.012 ..Consisting of lead-in layers inseparably applied to semiconductor body (EPO)
257/E23.019 ...Consisting of layered constructions comprising conductive layers and insulating layers, e.g., planar contacts (EPO)
257/E23.021 ....Bump or ball contacts (EPO)

2 257/E23.06 (0 OR, 2 XR)
Class 257 : ACTIVE SOLID-STATE DEVICES
257/E23.001 PACKAGING, INTERCONNECTS, AND MARKINGS FOR SEMICONDUCTOR OR OTHER SOLID-STATE DEVICES (EPO)
257/E23.01 .Arrangements for conducting electric current to or from solid-state body in operation, e.g., leads, terminal arrangements (EPO)
257/E23.023 ..Consisting of soldered or bonded constructions (EPO)
257/E23.06 ...Leads, i.e., metallizations or lead frames on insulating substrates, e.g., chip carriers (EPO)

2 324/537 (1 OR, 1 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF

ELECTRIC COMPONENTS
324/537 .Of individual circuit component or element

2 324/716 (2 OR, 0 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/600 IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES REPRESENTATIVE OF ELECTRICAL STIMULUS/RESPONSE RELATIONSHIPS
324/649 .Lumped type parameters
324/691 ..Using resistance or conductance measurement
324/713 ...With voltage or current signal evaluation
324/715 ....Including a particular probing technique (e.g., four point probe)
324/716 .....To determine dimension (e.g., distance or thickness)

2 324/755 (0 OR, 2 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF ELECTRIC COMPONENTS
324/537 .Of individual circuit component or element
324/754 ..With probe elements
324/755 ...Internal of or on support for device under test (DUT)

2 324/756 (2 OR, 0 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF ELECTRIC COMPONENTS
324/537 .Of individual circuit component or element
324/754 ..With probe elements
324/756 ...Contact confirmation

2 324/760 (1 OR, 1 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF ELECTRIC COMPONENTS
324/537 .Of individual circuit component or element
324/754 ..With probe elements
324/760 ...With temperature control

2 356/400 (2 OR, 0 XR)
Class 356 : OPTICS: MEASURING AND TESTING
356/399 BY ALIGNMENT IN LATERAL DIRECTION
356/400 .With light detector (e.g., photocell)

2 365/164 (1 OR, 1 XR)
Class 365 : STATIC INFORMATION STORAGE AND RETRIEVAL
365/129 SYSTEMS USING PARTICULAR ELEMENT
365/164 .Electrical contacts

2 369/126 (1 OR, 1 XR)
Class 369 : DYNAMIC INFORMATION STORAGE OR RETRIEVAL
369/99 SPECIFIC DETAIL OF INFORMATION HANDLING PORTION OF SYSTEM
369/126 .Electrical modification or sensing of storage medium (e.g., capacitive, resistive, electrostatic charge)

2 374/7 (0 OR, 2 XR)
Class 374 : THERMAL MEASURING AND TESTING

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        374/6          DISTANCE OR ANGLE
        374/7          .Thickness, erosion, or deposition

2  438/107       (2 OR, 0 XR)
        Class   438 :  SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

        438/106        PACKAGING (E.G., WITH MOUNTING, ENCAPSULATING,
                           ETC.) OR TREATMENT OF PACKAGED SEMICONDUCTOR
        438/107        .Assembly of plural semiconductive substrates
                          each possessing electrical device

2  438/125       (0 OR, 2 XR)
        Class   438 :  SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

        438/106        PACKAGING (E.G., WITH MOUNTING, ENCAPSULATING,
                           ETC.) OR TREATMENT OF PACKAGED SEMICONDUCTOR
        438/125        .Insulative housing or support

2  438/17        (2 OR, 0 XR)
        Class   438 :  SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

        438/14         WITH MEASURING OR TESTING
        438/17         .Electrical characteristic sensed

2  438/18        (0 OR, 2 XR)
        Class   438 :  SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

        438/14         WITH MEASURING OR TESTING
        438/17         .Electrical characteristic sensed
        438/18         ..Utilizing integral test element

2  438/611       (0 OR, 2 XR)
        Class   438 :  SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

        438/584        COATING WITH ELECTRICALLY OR THERMALLY
                           CONDUCTIVE MATERIAL
        438/597        .To form ohmic contact to semiconductive
                           material
        438/611        ..Beam lead formation

2  438/614       (0 OR, 2 XR)
        Class   438 :  SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

        438/584        COATING WITH ELECTRICALLY OR THERMALLY
                           CONDUCTIVE MATERIAL
        438/597        .To form ohmic contact to semiconductive
                           material
        438/612        ..Forming solder contact or bonding pad
        438/613        ...Bump electrode
        438/614        ....Plural conductive layers

2  451/548       (0 OR, 2 XR)
        Class   451 :  ABRADING
        451/540        RIGID TOOL
        451/548        .Rotary disk

2  451/552       (0 OR, 2 XR)
        Class   451 :  ABRADING
        451/540        RIGID TOOL
        451/552        .Stationary

2  977/849       (0 OR, 2 XR)
        Could not find class title.
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Could not find subclass title.

2 977/879 (0 OR, 2 XR)
Could not find class title.
Could not find subclass title.